CLAIMS:

1. A method for compression of a luminance-derived control signal for use in a video signal processing circuit, the method comprising:

quantizing the luminance-derived control signal using a non-linear compression function.

2. A method according to claim 1, wherein the method is for use in a video signal noise reduction circuit.

3. A method according to claim 1, wherein the non-linear compression function is applied to produce a substantially linear perceptual change in a noise reduction factor of the noise reduction circuit.

4. A method according to claim 2, wherein the non-linear compression function is determined by:

determining a desired range of noise reduction factors to be applied by a noise reduction circuit;

dividing the range into a predetermined number of substantially equal steps;

calculating a set of values of a luminance-derived control signal appropriate to each step as a set of quantization threshold values.

5. A method according to claim 1, further comprising:

averaging the luminance-derived control signal over a predetermined pixel area.

6. A video signal processing method, comprising:

deriving a first control signal from a luminance component of a video signal;

applying a noise reduction function controlled by the first control signal;

compressing the first control signal using a non-linear compression function to produce a second control signal;

storing the second control signal in a memory; and

applying a noise reduction function to chrominance component of the video signal based upon the stored second control signal.

7. A video signal processing method according to claim 6, wherein the compressing step comprises applying a non-linear compression function such that the second control signal produces a substantially linear perceptual change in a noise reduction factor applied to the chrominance component.

8. A video signal processing method according to claim 6, wherein the non-linear compression function is determined by:

determining a desired range of noise reduction factors to be applied by a noise reduction circuit;

dividing the range into a predetermined number of substantially equal steps; and

calculating a set of values of a luminance-derived control signal appropriate to each step as a set of quantization threshold values.

9. A video signal processing method according to claim 6, wherein the calculating step comprises averaging the first control signal over a predetermined pixel area.

10. An apparatus for compression of a luminance-derived control signal for use in a video signal processing circuit, comprising:

a control circuit (20) for quantizing the luminance-derived control signal using a non-linear compression function.

11. A video signal processing apparatus comprising:

a noise filter (10) for furnishing noise-reduced signals;

a control circuit (20) for deriving a first control signal from a luminance component of a video signal, controlling a noise reduction function applied by the noise filter (10) to a luminance component of a video signal using the first control signal, compressing the first control signal to produce a second control signal using a non-linear compression function, and controlling a noise reduction function applied by the noise filter to a luminance component of a video signal using the second control signal; and

a memory (30) for storing the second control signal.

12. A display apparatus, comprising:
the video signal processing apparatus of claim 11; and
a display device (40) for displaying the noise-reduced signals.